STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 143082

TO: Zohreh Fay **Location: 3a61 / 3c70** **Tuesday, January 25, 2005** **Art Unit: 1614** **Phone: 272-0573** **Serial Number: 10 / 039827**	**From: Jan Delaval** **Location: Biotech-Chem Library** **Rem 1a51** **Phone: 272-2504** **jan.delaval@uspto.gov**

Search Notes

STIC SEARCH RESULTS FEEDBACK FORM

Biotech-Chem Library

Questions about the scope or the results of the search? Contact ***the searcher or contact:***

Mary Hale, Information Branch Supervisor
Remsen Bldg. 01 D86
571-272-2507

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1610*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC-Biotech-Chem Library, Remsen Bldg.

143082

Access DB# _____

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Zeheh Fan Examiner #: 66646 Date 1/25/05
Art Unit: 1615 Phone Number 571-272-0573 Serial Number: 10/039,827
Mail Box and Bldg Room Location: 3C70 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Methods and compositions for modulating HPA adrenergic receptor activity

Inventors (please provide full names): Chow, Kenneth C.; Daniel, Fang; Wei Kuiken; Carst, Michael; Wheeler, Larry

Earliest Priority Filing Date: 10/19/2001

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search the compositions of claims 1-3 and the method of use of claims 4-6.

Thanks

Z. Fan

Dan

C-Chu

Kelly

STAFF USE ONLY

Searcher _____
Searcher Phone # 22504
Searcher Location _____
Date Searcher Picked Up 1/25/05
Date Completed 1/25/05
Searcher Prep & Review Time _____
Clerical Prep Time 10
Online Time 10

PTO-1590 (8-01)

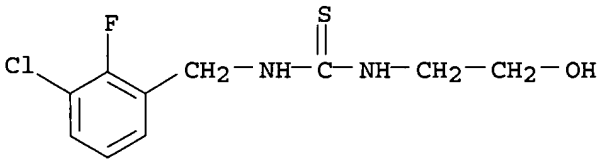
Type of Search

NA Sequence (#) _____
AA Sequence (#) _____
Structure (#) ✓
Bibliographic _____
Litigation _____
Fulltext _____
Patent Family _____
Other _____

Vendors and cost where applicable

STN ✓
Dialog _____
Questel/Orbit _____
Dr.Link _____
Lexis/Nexis _____
Sequence Systems _____
WWW/Internet _____
Other (specify) _____

```
=> fil reg
FILE 'REGISTRY' ENTERED AT 09:12:25 ON 25 JAN 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   23 JAN 2005  HIGHEST RN 819046-01-0
DICTIONARY FILE UPDATES:  23 JAN 2005  HIGHEST RN 819046-01-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> d ide can tot l12

L12  ANSWER 1 OF 2  REGISTRY  COPYRIGHT 2005 ACS on STN
RN   366786-91-6  REGISTRY
CN   Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)
     (CA INDEX NAME)
FS   3D CONCORD
MF   C10 H12 Cl F N2 O S
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  BIOL (Biological study); PREP (Preparation); USES
       (Uses)
RLD.P  Roles for non-specific derivatives from patents:  BIOL (Biological
       study); USES (Uses)
```



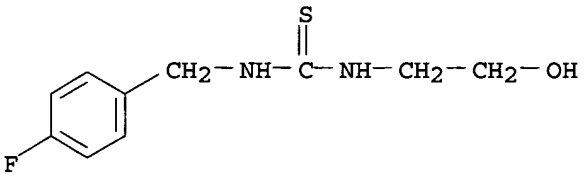

```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

               7 REFERENCES IN FILE CA (1907 TO DATE)
               3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
               7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE   1:  140:332518

REFERENCE   2:  140:13072

REFERENCE   3:  138:331737

REFERENCE   4:  137:73273
```

REFERENCE 5: 136:363872

REFERENCE 6: 135:327361

REFERENCE 7: 135:298811

L12 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2005 ACS on STN
RN **61290-32-2** REGISTRY
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C10 H13 F N2 O S**
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Conference; Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:331737

REFERENCE 2: 137:73273

REFERENCE 3: 136:363872

REFERENCE 4: 135:327361

REFERENCE 5: 135:298811

REFERENCE 6: 93:142669

REFERENCE 7: 93:132428

REFERENCE 8: 86:16440

=> d his

(FILE 'HOME' ENTERED AT 09:06:08 ON 25 JAN 2005)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 09:06:36 ON 25 JAN 2005

```
L1            1 S US20030092766/PN OR (US2001-039827# OR WO2002-US32571)/AP,PRN
                E CHOW K/AU
L2          228 S E3-E19
                E CHOW KEN/AU
L3           47 S E3-E14
                E GIL D/AU
L4           65 S E3,E6,E9,E11-E13
                E FANG W/AU
L5           66 S E3
                E FANG WEN/AU
L6           17 S E3,E13
                E FANG WENKUI/AU
L7            7 S E3,E4
                E GARST M/AU
L8          128 S E3,E4,E7-E9
                E WHEELER L/AU
L9          105 S E3,E4,E13-E15,E20
                E ALLERG/PA,CS
                E ALLERGA/PA,CS
L10         941 S ALLERGAN?/PA,CS
                SEL RN L1

     FILE 'REGISTRY' ENTERED AT 09:09:12 ON 25 JAN 2005
L11           5 S E1-E5
L12           2 S L11 AND (C10H12CLFN2OS OR C10H13FN2OS)
L13           0 S (61290-32-2 OR 366786-91-6)/CRN

     FILE 'HCAOLD' ENTERED AT 09:10:40 ON 25 JAN 2005
L14           0 S L12

     FILE 'HCAPLUS' ENTERED AT 09:10:44 ON 25 JAN 2005
L15          10 S L12
L16           7 S L1-L10 AND L15
L17           8 S L15,L16 AND (PD<=20011019 OR PRD<=20011019 OR AD<=20011019)
L18           2 S L15,L16 NOT L17
L19          10 S L17,L18

     FILE 'USPATFULL' ENTERED AT 09:11:50 ON 25 JAN 2005
L20           8 S L12

     FILE 'REGISTRY' ENTERED AT 09:12:25 ON 25 JAN 2005

=> fil uspatfull
FILE 'USPATFULL' ENTERED AT 09:12:37 ON 25 JAN 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 20 Jan 2005 (20050120/PD)
FILE LAST UPDATED: 20 Jan 2005 (20050120/ED)
HIGHEST GRANTED PATENT NUMBER: US6845512
HIGHEST APPLICATION PUBLICATION NUMBER: US2005015836
CA INDEXING IS CURRENT THROUGH 20 Jan 2005 (20050120/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 20 Jan 2005 (20050120/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2004
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2004

>>>  USPAT2 is now available.  USPATFULL contains full text of the     <<<
>>>  original, i.e., the earliest published granted patents or         <<<
>>>  applications.  USPAT2 contains full text of the latest US         <<<
>>>  publications, starting in 2001, for the inventions covered in     <<<
>>>  USPATFULL.  A USPATFULL record contains not only the original     <<<
>>>  published document but also a list of any subsequent              <<<
>>>  publications.  The publication number, patent kind code, and      <<<
>>>  publication date for all the US publications for an invention     <<<
```

>>> are displayed in the PI (Patent Information) field of USPATFULL <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc. <<<

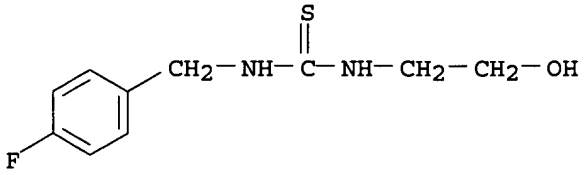
>>> USPATFULL and USPAT2 can be accessed and searched together <<<
>>> through the new cluster USPATALL. Type FILE USPATALL to <<<
>>> enter this cluster. <<<
>>> <<<
>>> Use USPATALL when searching terms such as patent assignees, <<<
>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication. <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

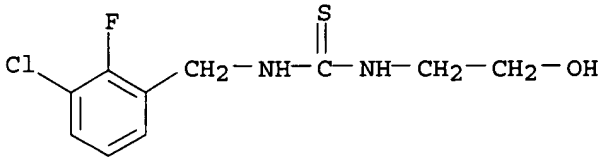
=> d l20 bib abs hitstr tot

L20 ANSWER 1 OF 8 USPATFULL on STN
AN 2004:223761 USPATFULL
TI Agent and methods for treating pain
IN Gil, Daniel W., Corona Del Mar, CA, United States
Aoki, Kei R., Coto de Caza, CA, United States
PA Allergan, Inc., Irvine, CA, United States (U.S. corporation)
PI US 6787517 B1 20040907
AI US 2000-751053 20001229 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Riley, Jezia
LREP Stout, Uxa, Buyan & Mullins, LLP, Uxa, Frank J., Hollrigel, Greg S.
CLMN Number of Claims: 46
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1772
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Agents for treating pain, methods for producing the agents and methods for treating pain by administration to a patient of a therapeutically effective amount of the agent are disclosed. The agent may include a clostridial neurotoxin, a fragment or a derivative thereof, attached to a targeting component, wherein the targeting component is selected from a group consisting of compounds which selectively binds at the alpha-2B or alpha-2B/alpha-2C adrenergic receptor subtype(s) as compared to other binding sites, for example, the alpha-2A adrenergic receptor subtype.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **61290-32-2D**, conjugates **366786-91-6D**, conjugates
(adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
RN 61290-32-2 USPATFULL
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

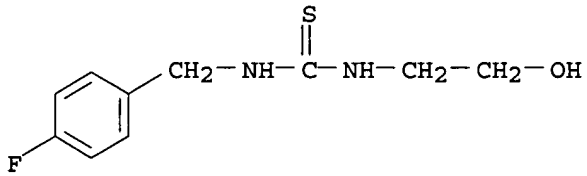


RN 366786-91-6 USPATFULL
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

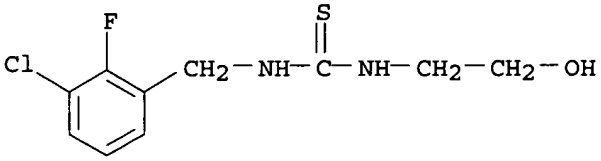


L20 ANSWER 2 OF 8 USPATFULL on STN
AN 2004:189764 USPATFULL
TI Agents and methods for treating pain
IN Gil, Daniel W., Corona Del Mar, CA, UNITED STATES
Aoki, Kei R., Coto de Caza, CA, UNITED STATES
PA Allergan Sales, Inc., Irvine, CA, 92612 (U.S. corporation)
PI US 2004146532 A1 20040729
AI US 2004-791434 A1 20040301 (10)
RLI Division of Ser. No. US 2000-751053, filed on 29 Dec 2000, PENDING
DT Utility
FS APPLICATION
LREP Frank J. Uxa, Stout, Uxa, Buyan & Mullins, LLP, Suite 300, 4 Venture, Irvine, CA, 92618
CLMN Number of Claims: 67
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 1856
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Agents for treating pain, methods for producing the agents and methods for treating pain by administration to a patient of a therapeutically effective amount of the agent are disclosed. The agent may include a clostridial neurotoxin, a fragment or a derivative thereof, attached to a targeting component, wherein the targeting component is selected from a group consisting of compounds which selectively binds at the alpha-2B or alpha-2B/alpha-2C adrenergic receptor subtype(s) as compared to other binding sites, for example, the alpha-2A adrenergic receptor subtype.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **61290-32-2D**, conjugates **366786-91-6D**, conjugates
(adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
RN 61290-32-2 USPATFULL
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

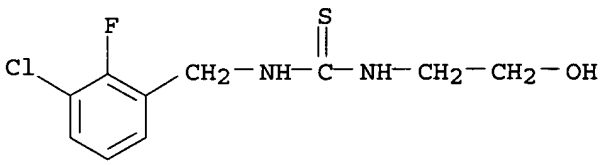


RN 366786-91-6 USPATFULL
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



L20 ANSWER 3 OF 8 USPATFULL on STN
AN 2004:179142 USPATFULL
TI Methods for the treatment of neurodegeneration
IN Wheeler, Larry A., Irvine, CA, UNITED STATES
Gil, Daniel W., Corona Del Mar, CA, UNITED STATES
Donello, John E., Dana Point, CA, UNITED STATES
PI US 2004138312 A1 20040715
AI US 2003-680879 A1 20031007 (10)
PRAI US 2002-417049P 20021008 (60)
DT Utility
FS APPLICATION
LREP Carlos A. Fisher, ALLERGAN, INC., T2-7H, 2525 Dupont Drive, Irvine, CA, 92612
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 681
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods of preventing or retarding the degeneration of neurons. Also disclosed are methods for treating Alzheimer's disease or Parkinson's disease through the administration of selective alpha 2B or alpha 2B/2C receptor agonists, hereby incorporated by reference herein.

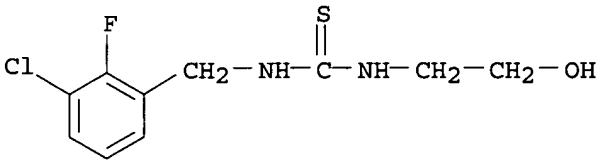
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **366786-91-6**
(α2B or α2B/2C adrenoceptor agonists for treatment of neurodegeneration)
RN 366786-91-6 USPATFULL
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



L20 ANSWER 4 OF 8 USPATFULL on STN
AN 2004:172660 USPATFULL
TI Novel methods and compositions for alleviating pain
IN Gil, Daniel W., Corona Del Mar, CA, UNITED STATES
Donello, John E., Dana Point, CA, UNITED STATES
PA Allergan, Inc. (U.S. corporation)
PI US 2004132824 A1 20040708
AI US 2003-735506 A1 20031211 (10)
RLI Division of Ser. No. US 2002-153154, filed on 21 May 2002, PENDING
DT Utility
FS APPLICATION
LREP Cathryn Campbell, McDERMOTT, WILL & EMERY, 4370 La Jolla Village Drive,

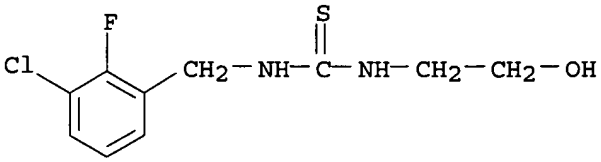
7th Floor, San Diego, CA, 92122
CLMN Number of Claims: 114
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 2796
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a method for the long-term relief of chronic pain in a subject by activating in the subject an analgesic α-adrenergic receptor in the absence of α-2A receptor activation over a period of at least three days, such that relief of chronic pain is maintained in the absence of continued activation of said receptor. The analgesic α-adrenergic receptor can be, for example, the α-2B receptor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **366786-91-6**
(α-adrenoceptor activation for alleviating pain)
RN 366786-91-6 USPATFULL
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



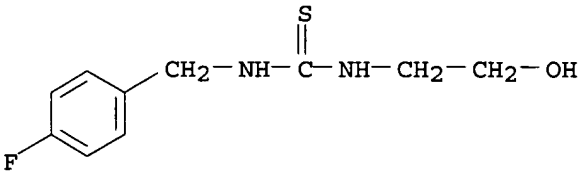
L20 ANSWER 5 OF 8 USPATFULL on STN
AN 2003:325106 USPATFULL
TI Novel methods and compositions for alleviating pain
IN Gil, Daniel W., Corona Del Mar, CA, UNITED STATES
Donello, John E., Dana Point, CA, UNITED STATES
PI US 2003229088 A1 20031211
AI US 2002-153154 A1 20020521 (10)
DT Utility
FS APPLICATION
LREP CAMPBELL & FLORES LLP, 4370 LA JOLLA VILLAGE DRIVE, 7TH FLOOR, SAN DIEGO, CA, 92122
CLMN Number of Claims: 114
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 2794
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a method for the long-term relief of chronic pain in a subject by activating in the subject an analgesic α-adrenergic receptor in the absence of α-2A receptor activation over a period of at least three days, such that relief of chronic pain is maintained in the absence of continued activation of said receptor. The analgesic α-adrenergic receptor can be, for example, the α-2B receptor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **366786-91-6**
(α-adrenoceptor activation for alleviating pain)
RN 366786-91-6 USPATFULL
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

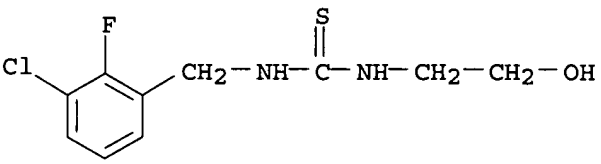


L20 ANSWER 6 OF 8 USPATFULL on STN
AN 2003:134677 USPATFULL
TI Methods and compositions for modulating alpha adrenergic receptor activity
IN Chow, Ken, Newport Coast, CA, UNITED STATES
Gil, Daniel W., Corona Del Mar, CA, UNITED STATES
Fang, Wenkui Ken, Irvine, CA, UNITED STATES
Garst, Michael E., Newport Beach, CA, UNITED STATES
Wheeler, Larry A., Irvine, CA, UNITED STATES
PI US 2003092766 A1 20030515
AI US 2001-39827 A1 20011019 (10)
DT Utility
FS APPLICATION
LREP Carlos A. Fisher, ALLERGAN, INC., T2-7H, 2525 Dupont Drive, Irvine, CA, 92612
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 670
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods and compositions for the treatment of pain and intraocular pressure. Particularly disclosed are new compositions for the treatment of chronic pain, glaucoma and methods for their use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **61290-32-2P 366786-91-6P**
(thiourea derivs., preparation and use in treatment of glaucoma and pain)
RN 61290-32-2 USPATFULL
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



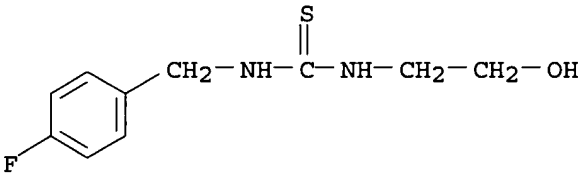
RN 366786-91-6 USPATFULL
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



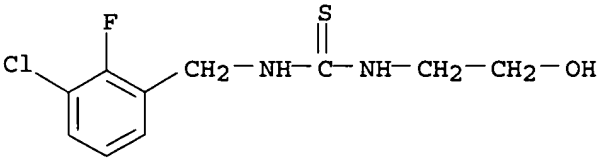
(thiourea derivs., prepn. and use in treatment of glaucoma and pain)

L20 ANSWER 7 OF 8 USPATFULL on STN
AN 2002:113091 USPATFULL
TI Methods and compositions for modulating alpha adrenergic receptor activity
IN Chow, Ken, Newport Coast, CA, UNITED STATES
Gil, Daniel W., Corona Del Mar, CA, UNITED STATES
Fang, Wenkui, Irvine, CA, UNITED STATES
Garst, Michael E., Newport Beach, CA, UNITED STATES
Wheeler, Larry A., Irvine, CA, UNITED STATES
PA ALLERGAN SALES, INC. (U.S. corporation)
PI US 2002058839 A1 20020516
US 6545182 B2 20030408
AI US 2001-778975 A1 20010205 (9)
RLI Continuation-in-part of Ser. No. US 2000-548315, filed on 13 Apr 2000, ABANDONED
DT Utility
FS APPLICATION
LREP Carlos A. Fisher, ALLERGAN, INC., T2-2E, 2525 Dupont Drive, Irvine, CA, 92623
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 782
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods and compositions for the treatment of pain. Particularly disclosed are new compositions for the treatment of chronic pain, and methods for their use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **61290-32-2P 366786-91-6P**
(preparation of thiourea compds. for modulating α-adrenergic receptor activity and use in treatment of pain)
RN 61290-32-2 USPATFULL
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



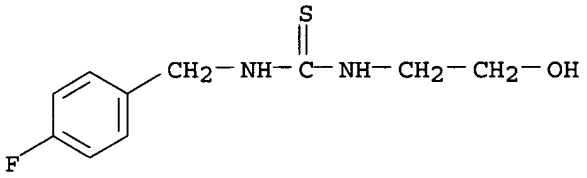
RN 366786-91-6 USPATFULL
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



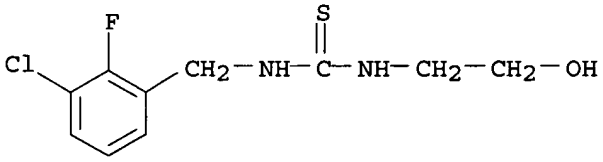
L20 ANSWER 8 OF 8 USPATFULL on STN
AN 2001:197069 USPATFULL
TI Methods and compositions for modulating alpha adrenergic receptor

activity
IN Chow, Ken, Newport Coast, CA, United States
Gil, Daniel W., Corona Del Mar, CA, United States
Fang, Wenkui Ken, Irvine, CA, United States
Garst, Michael E., Newport Beach, CA, United States
Wheeler, Larry A., Irvine, CA, United States
PA Allergan Sales, Inc., Irvine, CA, United States (U.S. corporation)
PI US 6313172 B1 20011106
AI US 2000-548410 20000413 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Vollano, Jean F.
LREP Fisher, Carlos A., Baran, Robert J., Voet, Martin A.
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 542
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods and compositions for the treatment of pain using this area derivatives. Particularly disclosed are new compositions for the treatment of chronic pain, and methods for their use.

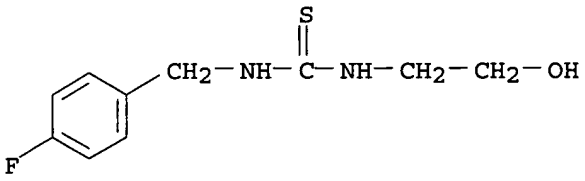
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **61290-32-2P 366786-91-6P**
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)
RN 61290-32-2 USPATFULL
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



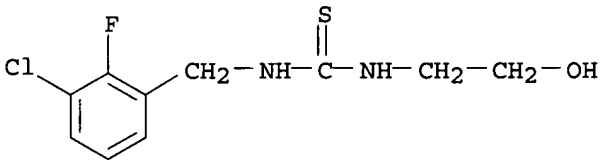
RN 366786-91-6 USPATFULL
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



IT **61290-32-2D**, alkyl esters **366786-91-6D**, alkyl esters
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)
RN 61290-32-2 USPATFULL
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 366786-91-6 USPATFULL
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 09:12:47 ON 25 JAN 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 25 Jan 2005 VOL 142 ISS 5
FILE LAST UPDATED: 24 Jan 2005 (20050124/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all hitstr tot l19

L19 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:331968 HCAPLUS
DN 140:332518
ED Entered STN: 23 Apr 2004
TI α2B or α2B/2C Adrenoceptor agonists for the treatment of neurodegeneration
IN **Wheeler, Larry A.**; **Gil, Daniel W.**; Donello, John E.
PA **Allergan, Inc., USA**
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-17

ICS A61K031-4174; A61P025-16; A61P025-28
CC 1-11 (Pharmacology)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004032913	A1	20040422	WO 2003-US31809	20031007
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2004138312	A1	20040715	US 2003-680879	20031007
PRAI	US 2002-417049P	P	20021008		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004032913	ICM	A61K031-17
	ICS	A61K031-4174; A61P025-16; A61P025-28

AB The invention discloses methods using α2B or α2B/2C adrenoceptor agonists for preventing or retarding the degeneration of neurons. Also disclosed are methods for treating Alzheimer's disease or Parkinson's disease through the administration of selective α2B or α2B/2C adrenoceptor agonists.

ST neurodegeneration neuroprotectant adrenergic 2B 2C agonist; Alzheimer Parkinson drug adrenergic 2B 2C agonist

IT Nerve, disease
(death; α2B or α2B/2C adrenoceptor agonists for treatment of neurodegeneration)

IT Brain, disease
Nervous system, disease
(degeneration; α2B or α2B/2C adrenoceptor agonists for treatment of neurodegeneration)

IT Brain
(locus ceruleus; α2B or α2B/2C adrenoceptor agonists for treatment of neurodegeneration)

IT Cell death
(neuron; α2B or α2B/2C adrenoceptor agonists for treatment of neurodegeneration)

IT Cytoprotective agents
(neuroprotective; α2B or α2B/2C adrenoceptor agonists for treatment of neurodegeneration)

IT Mental activity
(sedation; α2B or α2B/2C adrenoceptor agonists for treatment of neurodegeneration)

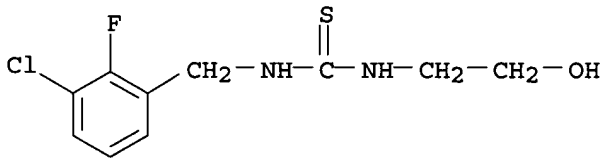
IT Brain
(substantia nigra; α2B or α2B/2C adrenoceptor agonists for treatment of neurodegeneration)

IT Drug delivery systems
(systemic; α2B or α2B/2C adrenoceptor agonists for treatment of neurodegeneration)

IT Ketones, biological studies
Thiocarbonyl compounds
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thiones; α2B or α2B/2C adrenoceptor agonists for treatment of neurodegeneration)

IT Brain
(ventral tegmental area; α2B or α2B/2C adrenoceptor

agonists for treatment of neurodegeneration)
IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α1; α2B or α2B/2C adrenoceptor agonists for
treatment of neurodegeneration)
IT Adrenoceptor agonists
(α2-; α2B or α2B/2C adrenoceptor agonists for
treatment of neurodegeneration)
IT Alzheimer's disease
Anti-Alzheimer's agents
Antiparkinsonian agents
Nervous system agents
Parkinson's disease
(α2B or α2B/2C adrenoceptor agonists for treatment of
neurodegeneration)
IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α2B; α2B or α2B/2C adrenoceptor agonists for
treatment of neurodegeneration)
IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α2C; α2B or α2B/2C adrenoceptor agonists for
treatment of neurodegeneration)
IT 113775-47-6, Dexmedetomidine
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α2B or α2B/2C adrenoceptor agonists for treatment of
neurodegeneration)
IT 62-56-6D, Thiourea, derivs. 91-19-0D, Quinoxaline, derivs.
28299-33-4D, Imidazoline, derivs. 59803-98-4, Brimonidine
366786-91-6 378750-35-7D, Imidazolone, derivs. 423773-41-5
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(α2B or α2B/2C adrenoceptor agonists for treatment of
neurodegeneration)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Allergan Inc; WO 02076950 A 2002 HCAPLUS
(2) Allergan Inc; WO 03099795 A 2003 HCAPLUS
(3) Allergan Sales Inc; WO 9928300 A 1999 HCAPLUS
IT **366786-91-6**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(α2B or α2B/2C adrenoceptor agonists for treatment of
neurodegeneration)
RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)
(CA INDEX NAME)



L19 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:950846 HCAPLUS
DN 140:13072
ED Entered STN: 07 Dec 2003
TI Novel methods and compositions for alleviating pain

IN **Gil, Daniel W.**; Donello, John E.
PA **Allergan, Inc., USA**
SO PCT Int. Appl., 129 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-538
ICS A61K031-4164; A61K031-4168; A61K031-4178; A61K031-498; A61K031-137; A61P029-00
CC 1-11 (Pharmacology)
Section cross-reference(s): 25
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003099289	A2	20031204	WO 2003-US13057	20030423
WO 2003099289	A3	20040318		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003229088	A1	20031211	US 2002-153154	20020521
US 2004132824	A1	20040708	US 2003-735506	20031211
PRAI US 2002-153154	A	20020521		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003099289	ICM	A61K031-538
	ICS	A61K031-4164; A61K031-4168; A61K031-4178; A61K031-498; A61K031-137; A61P029-00

AB The invention provides a method for the long-term relief of chronic pain in a subject by activating in the subject an analgesic α-adrenergic receptor in the absence of α-2A receptor activation over a period of at least three days, such that relief of chronic pain is maintained in the absence of continued activation of said receptor. The analgesic α-adrenergic receptor can be, for example, the α-2B receptor.

ST pain alleviation analgesic alpha adrenoceptor agonist antagonist
IT Pain
Skin, disease
(allodynia; α-adrenoceptor activation for alleviating pain)
IT Nerve, disease
(diabetic neuropathy; α-adrenoceptor activation for alleviating pain)
IT Viscera
(disease, pain; α-adrenoceptor activation for alleviating pain)
IT Behavior
(exploratory; α-adrenoceptor activation for alleviating pain)
IT Mutation
(homozygous point mutation at α-2A receptor locus, Asp79 to Asn mutation; α-adrenoceptor activation for alleviating pain)
IT Drug delivery systems
(injections, s.c., minipumps; α-adrenoceptor activation for alleviating pain)
IT Nerve, disease
(injury; α-adrenoceptor activation for alleviating pain)
IT Intestine, disease
(irritable bowel syndrome; α-adrenoceptor activation for alleviating pain)

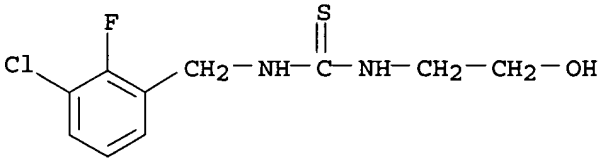
IT Behavior
(motor; α-adrenoceptor activation for alleviating pain)
IT Nerve, disease
Pain
(neuralgia; α-adrenoceptor activation for alleviating pain)
IT Drug delivery systems
(oral; α-adrenoceptor activation for alleviating pain)
IT Arthritis
Inflammation
Neoplasm
(pain; α-adrenoceptor activation for alleviating pain)
IT Pain
(postoperative; α-adrenoceptor activation for alleviating pain)
IT Nerve
(sciatic; α-adrenoceptor activation for alleviating pain)
IT Pain
(visceral; α-adrenoceptor activation for alleviating pain)
IT Animal
Mus
(wild; α-adrenoceptor activation for alleviating pain)
IT Adrenoceptor agonists
(α-; α-adrenoceptor activation for alleviating pain)
IT Analgesia
Analgesics
Headache
Hypnotics and Sedatives
Hypotension
(α-adrenoceptor activation for alleviating pain)
IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α1A; α-adrenoceptor activation for alleviating pain)
IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α1B; α-adrenoceptor activation for alleviating pain)
IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α1D; α-adrenoceptor activation for alleviating pain)
IT Adrenoceptor antagonists
(α2-, α-2A; α-adrenoceptor activation for alleviating pain)
IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α2A; α-adrenoceptor activation for alleviating pain)
IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α2B, agonists; α-adrenoceptor activation for alleviating pain)
IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α2C, agonists; α-adrenoceptor activation for alleviating pain)
IT 62-56-6, Thiourea, biological studies 62-56-6D, Thiourea, derivs.
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α-adrenoceptor activation for alleviating pain)
IT 51-41-2, Norepinephrine 4205-90-7, Clonidine 51322-75-9, Tizanidine 59803-98-4, Brimonidine 113775-47-6, Dexmedetomidine 159091-94-8 168570-37-4 226571-24-0 226571-24-0D, stereoisomers **366786-91-6** 423773-40-4 423773-40-4D, stereoisomers 423773-41-5 423773-41-5D, stereoisomers 628730-19-8 628730-19-8D, stereoisomers 628730-30-3 628730-35-8 628730-36-9 629628-13-3 629628-13-3D, stereoisomers 629628-14-4 629628-15-5 629628-16-6 629628-17-7 629628-18-8 630410-33-2, BRL 48962 630410-33-2D, BRL 48962, esters, amides and stereoisomers

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(α-adrenoceptor activation for alleviating pain)

IT **366786-91-6**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(α-adrenoceptor activation for alleviating pain)

RN 366786-91-6 HCAPLUS

CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:334962 HCAPLUS

DN 138:331737

ED Entered STN: 02 May 2003

TI Methods and compositions for modulating α adrenergic receptor activity, and therapeutic use thereof

IN **Chow, Ken; Gil, Daniel W.; Fang, Wenkui Ken; Garst, Michael E.; Wheeler, Larry A.**

PA **Allergan, Inc., USA**

SO PCT Int. Appl., 35 pp.
CODEN: PIXXD2

DT Patent

LA English

IC ICM A61P027-06
ICS A61K031-17; A61K031-222

CC 1-12 (Pharmacology)
Section cross-reference(s): 63

FAN.CNT 1

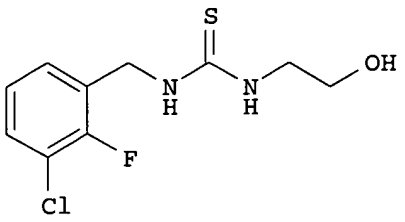
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003035178	A1	20030501	WO 2002-US32571	20021011 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003092766	A1	20030515	US 2001-39827	20011019 <--
PRAI US 2001-39827	A	20011019 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003035178	ICM	A61P027-06
	ICS	A61K031-17; A61K031-222
US 2003092766	ECLA	A61K031/17 <--

OS MARPAT 138:331737

GI



I

AB Methods and compns. are discloses for the treatment of pain and intraocular pressure. Particularly disclosed are compns. for the treatment of chronic pain, glaucoma, and methods for their use. Compds. of the invention include e.g. I (preparation given).

ST thiourea deriv prepn chronic pain glaucoma; alpha adrenergic ligand therapeutic pain intraocular pressure

IT Pain
(chronic; thiourea derivs., preparation and use in treatment of glaucoma and pain)

IT Analgesics
Antiglaucoma agents
Drug delivery systems
Glaucoma (disease)
Pain
(thiourea derivs., preparation and use in treatment of glaucoma and pain)

IT **61290-32-2P 366786-91-6P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(thiourea derivs., preparation and use in treatment of glaucoma and pain)

IT **366786-91-6D**, alkyl esters
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thiourea derivs., preparation and use in treatment of glaucoma and pain)

IT 141-43-5, Ethanolamine, reactions 2740-88-7, 4-Fluorobenzyl isothiocyanate 366787-56-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(thiourea derivs., preparation and use in treatment of glaucoma and pain)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

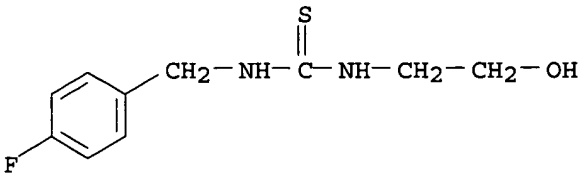
RE

(1) Allergan Sales Inc; WO 0178702 A 2001 HCAPLUS
(2) Allergan Sales Inc; WO 0178703 A 2001 HCAPLUS
(3) Egyt Gyogyszervegyeszeti Gyar; GB 1499485 A 1978 HCAPLUS
(4) Reiter, J; EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY 1980, V15(1), P41 HCAPLUS

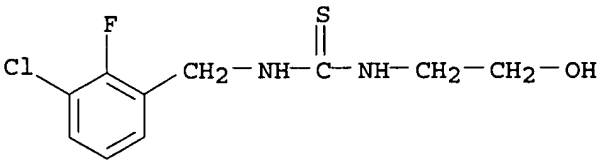
IT **61290-32-2P 366786-91-6P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(thiourea derivs., preparation and use in treatment of glaucoma and pain)

RN 61290-32-2 HCAPLUS

CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thiourea derivs., prepn. and use in treatment of glaucoma and pain

L19 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:521523 HCAPLUS
DN 137:73273
ED Entered STN: 12 Jul 2002
TI Adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain
IN **Gil, Daniel W.**; Aoki, Kei Roger
PA **Allergan Sales, Inc., USA**
SO PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K039-00
CC 1-11 (Pharmacology)
Section cross-reference(s): 63
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002053177	A2	20020711	WO 2001-US48651	20011214 <--
WO 2002053177	A3	20030918		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 6787517	B1	20040907	US 2000-751053	20001229 <--
CA 2433332	AA	20020711	CA 2001-2433332	20011214 <--
EP 1363674	A2	20031126	EP 2001-990212	20011214 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2004146532	A1	20040729	US 2004-791434	20040301 <--
PRAI US 2000-751053	A	20001229 <--		

WO 2001-US48651 W 20011214

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002053177	ICM	A61K039-00
US 6787517	ECLA	A61K035/74; A61K038/16C; A61K047/48H4; A61K047/48R2D; A61K047/48T2C12P4; A61K047/48T4B18; C07K016/18 <--
US 2004146532	ECLA	A61K035/74; A61K038/16C; A61K047/48H4; A61K047/48R2D; A61K047/48T2C12P4; A61K047/48T4B18; C07K016/18 <--

OS MARPAT 137:73273

AB Agents for treating pain, methods for producing the agents, and methods for treating pain by administration to a patient of a therapeutically effective amount of the agent, are disclosed. The agent may include a clostridial neurotoxin, a fragment or a derivative thereof, attached to a targeting component, wherein the targeting component is selected form a group consisting of compds. which selectively binds at the α2b or α2b/α2c adrenergic receptor subtype(s) as compared to other binding sites, e.g. the α2a adrenergic receptor subtype.

ST adrenergic receptor ligand neurotoxin conjugate analgesic

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(MBP (maltose-binding protein), fusion products; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Analgesics
Cytoplasm
Drug delivery systems
Human
Ribosome
(adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Amino acids, biological studies
Gene
Neurotransmitters
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Antibodies and Immunoglobulins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Pain
Skin, disease
(allodynia; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Toxins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(butyricum, conjugates; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Pain
(chronic; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Hemocyanins
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(conjugates; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT Proteins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

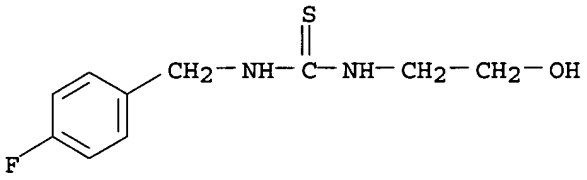
(conjugates; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT Viscera
(disease, pain; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT Drug delivery systems
(injections, i.m.; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT Drug delivery systems
(injections, s.c.; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT Biological transport
(intracellular; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT Drug delivery systems
(intrathecal; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT Nerve, disease
(neuropathy, neuropathic pain; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT Pain
(referred; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(saporins, conjugates; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT Hydrocarbons, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(spacer; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT Toxins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tetanus, conjugates; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT Pain
(visceral; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT Antigens
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(α2b receptor second extracellular loop; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α2B; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α2C; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT 440645-44-3
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)
IT 19216-56-9D, Prazosin, conjugates **61290-32-2D**, conjugates
67339-62-2D, ARC 239, conjugates 81167-16-0D, Imiloxan, conjugates
93384-43-1D, Botulin A, conjugates 93384-44-2D, Botulin B, conjugates
93384-46-4D, Botulin D, conjugates 93384-47-5D, Botulin E, conjugates

107231-12-9D, Botulin, conjugates 107231-13-0D, Botulin C1, conjugates
107231-15-2D, Botulin F, conjugates 107231-16-3D, Botulin G, conjugates
366786-91-6D, conjugates
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

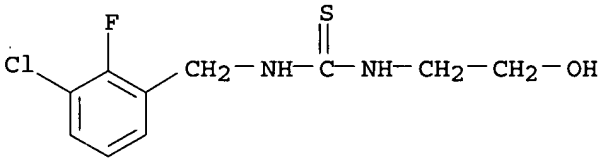
IT 147-85-3, L-Proline, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(proline-containing polypeptide, spacer; adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

IT **61290-32-2D**, conjugates **366786-91-6D**, conjugates
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(adrenergic receptor ligand-neurotoxin conjugates and methods for treating pain)

RN 61290-32-2 HCAPLUS
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:369027 HCAPLUS
DN 136:363872
ED Entered STN: 18 May 2002
TI Preparation of thiourea compounds for modulating α-adrenergic receptor activity and use in the treatment of pain
IN **Chow, Ken**; **Gil, Daniel W.**; **Fang, Wenkui**; **Garst, Michael E.**; **Wheeler, Larry A.**
PA **Allergan Sales, Inc., USA**
SO U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 548,315, abandoned.
CODEN: USXXCO
DT Patent
LA English
IC ICM A61K031-17
ICS C07C275-24
NCL 564047000
CC 1-11 (Pharmacology)
Section cross-reference(s): 25, 63
FAN.CNT 2

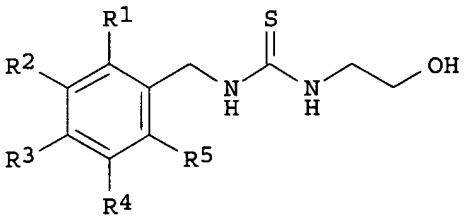
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002058839	A1	20020516	US 2001-778975	20010205 <--
	US 6545182	B2	20030408		
PRAI	US 2000-548315	B2	20000413 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2002058839	ICM	A61K031-17
	ICS	C07C275-24
	NCL	564047000

OS MARPAT 136:363872

GI



I

AB Methods and compns. are disclosed which use thiourea compds. I (R1, R5 = halo, alkyl, alkoxy, etc.; R2, R4 = halo, alkyl, alkoxy, etc.; R3 = F, H), and alkyl esters thereof, for the treatment of pain. Preparation of I [R1 = F; R2 = Cl; R3-R5 = H] which showed EC50 of 16 nM and 457 nM at α2B and α2C receptor in RSAT assay, was given. Particularly disclosed are compns. for the treatment of chronic pain, and methods for their use.

ST thiourea prepn adrenergic receptor modulator; analgesic allodynia thiourea prepn

IT Pain
Skin, disease
(allodynia; preparation of thiourea compds. for modulating α-adrenergic receptor activity and use in treatment of pain)

IT Drug delivery systems
(oral; preparation of thiourea compds. for modulating α-adrenergic receptor activity and use in treatment of pain)

IT Analgesics
Drug delivery systems
Human
Structure-activity relationship
(preparation of thiourea compds. for modulating α-adrenergic receptor activity and use in treatment of pain)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α2A; preparation of thiourea compds. for modulating α-adrenergic receptor activity and use in treatment of pain)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α2B; preparation of thiourea compds. for modulating α-adrenergic receptor activity and use in treatment of pain)

IT Adrenoceptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(α2C; preparation of thiourea compds. for modulating α-adrenergic receptor activity and use in treatment of pain)

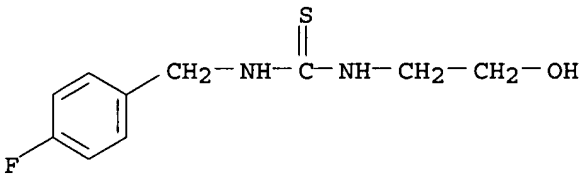
IT **61290-32-2P** 61290-44-6P 61290-46-8P 61290-47-9P
74548-54-2P 74787-66-9P 366786-78-9P 366786-79-0P 366786-80-3P
366786-81-4P 366786-82-5P 366786-83-6P 366786-84-7P 366786-85-8P
366786-86-9P 366786-87-0P 366786-89-2P 366786-90-5P

366786-91-6P 366786-92-7P 366786-93-8P 366786-94-9P
366786-95-0P 366786-96-1P 366786-97-2P 366786-98-3P 366786-99-4P
366787-00-0P 366787-01-1P 366787-02-2P 366787-03-3P 366787-04-4P
366787-05-5P 366787-06-6P 366787-07-7P 366787-09-9P 366787-10-2P
366787-11-3P 366787-12-4P 366787-13-5P 366787-14-6P 366787-15-7P
366787-16-8P 366787-17-9P 366787-18-0P 366787-19-1P 366787-20-4P
366787-21-5P 366787-22-6P 366787-23-7P 366787-24-8P 366787-25-9P
366787-27-1P 366787-28-2P 366787-29-3P 366787-30-6P 366787-31-7P
366787-32-8P 366787-33-9P 366787-34-0P 366787-35-1P 366787-36-2P
366787-37-3P 366787-38-4P 366787-39-5P 366787-40-8P 366787-41-9P
366787-42-0P 366787-43-1P 366787-45-3P 366787-46-4P 366787-47-5P
366787-48-6P 366787-49-7P 366787-50-0P 366787-51-1P 366787-52-2P
366787-53-3P 366787-54-4P 366787-55-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of thiourea compds. for modulating α-adrenergic receptor activity and use in treatment of pain)

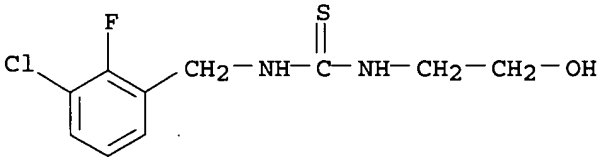
IT 366787-56-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; preparation of thiourea compds. for modulating α-adrenergic receptor activity and use in treatment of pain)

IT **61290-32-2P 366786-91-6P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of thiourea compds. for modulating α-adrenergic receptor activity and use in treatment of pain)

RN 61290-32-2 HCAPLUS
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:780662 HCAPLUS
DN 135:327361
ED Entered STN: 26 Oct 2001
TI Methods and compositions using benzylthiourea derivatives for modulating alpha adrenergic receptor activity
IN **Chow, Ken; Gil, Daniel W.; Fang, Wenkui Ken; Garst, Michael E.; Wheeler, Larry A.**

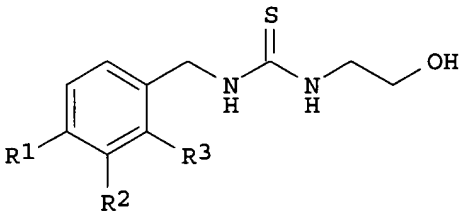
PA **Allergan Sales, Inc., USA**
SO PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-00
CC 1-11 (Pharmacology)
Section cross-reference(s): 25
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001078703	A2	20011025	WO 2001-US11843	20010411 <--
	WO 2001078703	A3	20020321		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6313172	B1	20011106	US 2000-548410	20000413 <--
	CA 2406057	AA	20011025	CA 2001-2406057	20010411 <--
	EP 1280525	A2	20030205	EP 2001-926876	20010411 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003530430	T2	20031014	JP 2001-576004	20010411 <--
	NZ 522027	A	20041126	NZ 2001-522027	20010411 <--
PRAI	US 2000-548410	A	20000413 <--		
	WO 2001-US11843	W	20010411 <--		

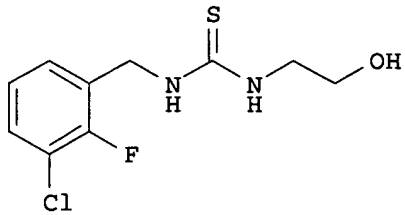
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001078703	ICM	A61K031-00

OS MARPAT 135:327361
GI



I



II

AB The invention discloses benzylthiourea derivs. I (R1, R3 = F, H; R2 = Cl, H; with provisos, and alkyl esters thereof) as α2-adrenergic

receptor modulators. The invention also describes the synthesis of a compound II (wherein R1= H, R2= Cl and R3 = F). The effects of these disclosed compds. on acute and chronic pain, their sedative action and their cardiovascular effects are described.

ST alpha adrenergic receptor modulator benzylthiourea deriv prepn analgesic; sedation analgesic benzylthiourea deriv adrenoceptor modulator

IT Pain
Skin, disease
(allodynia; benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)

IT Analgesics
Drug delivery systems
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)

IT Pain
(chronic; benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)

IT Drug delivery systems
(oral; benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)

IT Adrenoceptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(α-; benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)

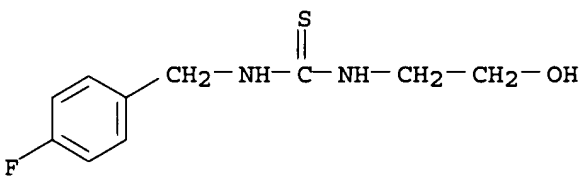
IT **61290-32-2P** 61290-44-6P **366786-91-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)

IT **61290-32-2D**, alkyl esters **366786-91-6D**, alkyl esters
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)

IT 141-43-5, Ethanolamine, reactions 446-48-0, 2-Fluoro benzyl bromide 2740-88-7, 4-Fluoro benzyl isothiocyanate 366787-56-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)

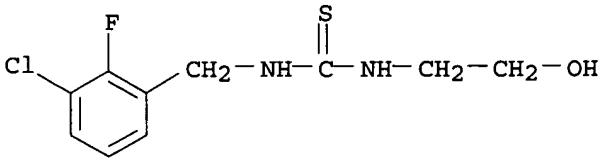
IT **61290-32-2P 366786-91-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)

RN 61290-32-2 HCAPLUS
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

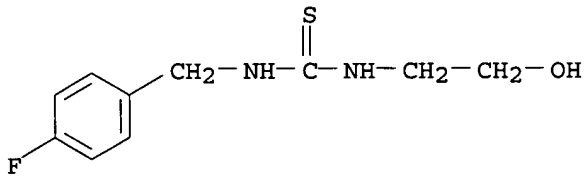


RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI)

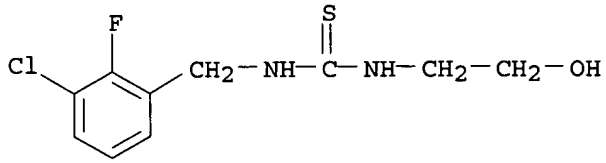
(CA INDEX NAME)



IT **61290-32-2D**, alkyl esters **366786-91-6D**, alkyl esters
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(benzylthiourea derivs. for modulating alpha adrenoceptor activity and their application in pain therapy)
RN 61290-32-2 HCAPLUS
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



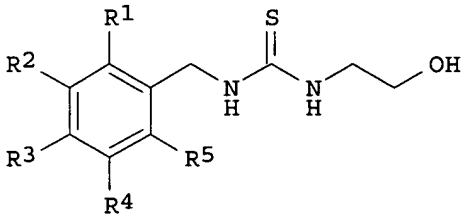
L19 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:780661 HCAPLUS
DN 135:298811
ED Entered STN: 26 Oct 2001
TI Thiourea compounds for modulating α-adrenergic receptor activity, preparation, compositions, and use in the treatment of pain
IN **Chow, Ken; Gil, Daniel W.; Fang, Wenkui Ken; Garst, Michael E.; Wheeler, Larry A.**
PA **Allergan Sales, Inc., USA**
SO PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-00
CC 1-11 (Pharmacology)
Section cross-reference(s): 25, 63
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 2001078702 A2 20011025 WO 2001-US11842 20010411 <--
WO 2001078702 A3 20020321
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
CA 2405796 AA 20011025 CA 2001-2405796 20010411 <--
EP 1280524 A2 20030205 EP 2001-926875 20010411 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
JP 2003530429 T2 20031014 JP 2001-576003 20010411 <--
PRAI US 2000-548315 A 20000413 <--
WO 2001-US11842 W 20010411 <--
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2001078702	ICM	A61K031-00

OS MARPAT 135:298811
GI



I

AB Methods and compns. are disclosed which use thiourea compds. I (R1, R2, R4, R5 = H, OH, C1-3 alkyl, etc.; R3 = H, F), and alkyl esters thereof, for the treatment of pain. Particularly disclosed are compns. for the treatment of chronic pain, and methods for their use.

ST thiourea deriv prepn adrenergic receptor modulator; chronic pain treatment thiourea deriv

IT Pain
Skin, disease
(allodynia; thiourea compds. for modulating α-adrenergic receptor activity, preparation, compns., and use in treatment of pain)

IT Drug delivery systems
(oral; thiourea compds. for modulating α-adrenergic receptor activity, preparation, compns., and use in treatment of pain)

IT Analgesics
Drug delivery systems
Structure-activity relationship
(thiourea compds. for modulating α-adrenergic receptor activity, preparation, compns., and use in treatment of pain)

IT Adrenoceptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(α2A; thiourea compds. for modulating α-adrenergic receptor activity, preparation, compns., and use in treatment of pain)

IT Adrenoceptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(α2B; thiourea compds. for modulating α-adrenergic receptor activity, preparation, compns., and use in treatment of pain)

IT Adrenoceptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(α2C; thiourea compds. for modulating α-adrenergic receptor activity, preparation, compns., and use in treatment of pain)

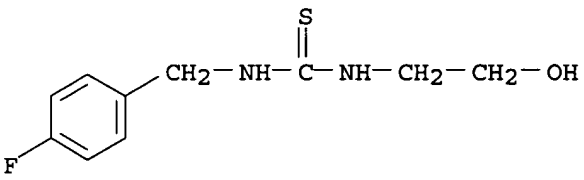
IT 141-43-5, Ethanolamine, reactions 366787-56-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; thiourea compds. for modulating α-adrenergic receptor activity, preparation, compns., and use in treatment of pain)

IT 61290-44-6
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(thiourea compds. for modulating α-adrenergic receptor activity, preparation, compns., and use in treatment of pain)

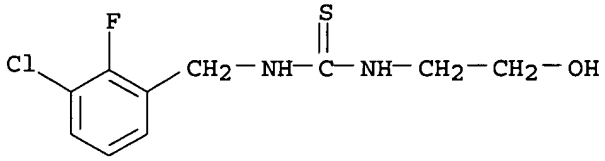
IT **61290-32-2** 61290-46-8 61290-47-9 74548-54-2 74787-66-9
366786-78-9 366786-79-0 366786-80-3 366786-81-4 366786-82-5
366786-83-6 366786-84-7 366786-85-8 366786-86-9 366786-87-0
366786-89-2 366786-90-5 **366786-91-6** 366786-92-7
366786-93-8 366786-94-9 366786-95-0 366786-96-1 366786-97-2
366786-98-3 366786-99-4 366787-00-0 366787-01-1 366787-02-2
366787-03-3 366787-04-4 366787-05-5 366787-06-6 366787-07-7
366787-09-9 366787-10-2 366787-11-3 366787-12-4 366787-13-5
366787-14-6 366787-15-7 366787-16-8 366787-17-9 366787-18-0
366787-19-1 366787-20-4 366787-21-5 366787-22-6 366787-23-7
366787-24-8 366787-25-9 366787-27-1 366787-28-2 366787-29-3
366787-30-6 366787-31-7 366787-32-8 366787-33-9 366787-34-0
366787-35-1 366787-36-2 366787-37-3 366787-38-4 366787-39-5
366787-40-8 366787-41-9 366787-42-0 366787-43-1 366787-45-3
366787-46-4 366787-47-5 366787-48-6 366787-49-7 366787-50-0
366787-51-1 366787-52-2 366787-53-3 366787-54-4 366787-55-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thiourea compds. for modulating α-adrenergic receptor activity, preparation, compns., and use in treatment of pain)

IT **61290-32-2 366786-91-6**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thiourea compds. for modulating α-adrenergic receptor activity, preparation, compns., and use in treatment of pain)

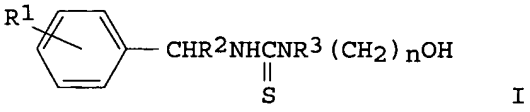
RN 61290-32-2 HCAPLUS
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 366786-91-6 HCAPLUS
CN Thiourea, N-[(3-chloro-2-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



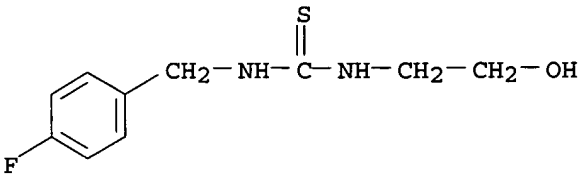
L19 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1980:542669 HCAPLUS
DN 93:142669
ED Entered STN: 12 May 1984
TI Synthesis of new biologically active thiourea derivatives
AU Reiter, J.; Toldy, L.; Schafer, I.; Szondy, E.; Szekely, J.; Dunai-Kovacs, Z.; Borsy, J.; Lukovics, I.
CS Vyzk. Ustav Farm. Chem., Budapest, Hung.
SO Rozvoj Farm. Ramci Ved.-Tech. Revoluce, Sb. Prednasek Sjezdu Cesk. Farm. Spol., 7th (**1979**), Meeting Date 1977, 121-30 Publisher: Univ. Karlova, Prague, Czech.
CODEN: 43OFAO
DT Conference
LA Czech
CC 1-3 (Pharmacodynamics)
GI



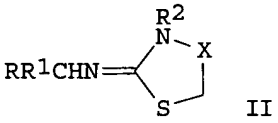
I

AB Twenty-four thioureas [I; R1 = H, F, CF3, or Me; R2 = H or C1-3 alkyl; R3 = H, Me, Et, (CH2)3Me, or (CH2)2OH; n = 2-4] were prepared and screened for diuretic activity in rats. Many I had greater saluretic activity than hydrochlorothiazide and produced a higher Na+-to-K+ ratio in the urine than did the latter. The most active compound was I (R1 = 2-F; R2 = Me; R3 = H; n = 2) [61290-50-4]. Structure-diuretic activity relations are discussed. Most I had hypotensive activity in cats. A related compound, 1-(4-chlorobenzyl)-3-methyl-3-(2-hydroxyethyl)thiourea [61290-76-4], also was one of the most active in this respect.
ST phenylalkylthiourea prepn diuretic antihypertensive; structure activity phenylalkylthiourea diuretic; thiourea deriv diuretic antihypertensive
IT Antihypertensives
Diuretics
(thiourea derivs.)
IT Molecular structure-biological activity relationship
(diuretic, of thiourea derivs.)
IT 61290-76-4
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antihypertensive activity of)
IT 6098-41-5 29146-63-2 **61290-32-2** 61290-42-4 61290-44-6
61290-46-8 61290-47-9 61290-48-0 61290-50-4 74548-41-7
74548-42-8 74548-43-9 74548-44-0 74548-45-1 74548-46-2
74548-47-3 74548-48-4 74548-49-5 74548-50-8 74548-51-9
74548-52-0 74548-53-1 74548-54-2 74548-55-3
RL: BIOL (Biological study)

(antihypertensive and diuretic activity of)
IT **61290-32-2**
RL: BIOL (Biological study)
(antihypertensive and diuretic activity of)
RN 61290-32-2 HCAPLUS
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1980:532428 HCAPLUS
DN 93:132428
ED Entered STN: 12 May 1984
TI Synthesis of new "benzyl"-thiourea derivatives and their cyclic analogs with diuretic and saluretic activity
AU Reiter, J.; Toldy, L.; Schaefer, I.; Szondy, E.; Borsy, J.; Lukovits, I.
CS Inst. Drug Res., Budapest, Hung.
SO European Journal of Medicinal Chemistry (**1980**), 15(1), 41-53
CODEN: EJMCA5; ISSN: 0009-4374
DT Journal
LA English
CC 28-15 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 6, 25
OS CASREACT 93:132428
GI



II

AB RR1CHNHCSNR2R3 [I; R = optionally substituted Ph; R1 = H, Me, Et, Pr, CHMe2, (CH2)6Me, cyclopropyl; R2 = H, Me, Et, Bu, cyclohexyl, CH2CH2OH; R3 = (CH2)3OH, CH2CHMeOH, CH2CMe2OH, CHEtCH2OH, allyl, CH2CMe:CH2, CH2CH2OH] and their cyclic derivs. II (X = CH2, CH2CH2, CH2CHMe, CH2CMe2, CHEtCH2, CH2CH:CH) with diuretic and saluretic activity were prepared Thus, RR1CHNH2 were converted to RR1CHNCS or RR1CHNHCS2Me, which were treated with R2R3NH to give I. Acidic cyclizaton of I using HCl gave II. The quant. structure activity relationships for I and II were determined using the Free-Wilson approach.
ST benzylthiourea diuretic saluretic prepn; benzylthiazolidine diuretic prepn; thiazolidine benzyl diuretic prepn; benzylamine isothiocyanation; isothiocyanates alkylamine reaction; carbaminodithioate alkylamine reaction; thiourea benzyl prepn cyclization
IT Diuretics
(benzylthioureas and benzylaminothiazolidines)
IT Molecular structure-biological activity relationship
(diuretic, of benzylthioureas and benzylaminothiazolidines)
IT 13578-57-9P 13677-15-1P 13846-58-7P 30480-73-0P 61290-51-5P

61290-53-7P 61290-56-0P 61290-60-6P 61290-65-1P 61290-67-3P
61290-78-6P 61290-83-3P 61290-89-9P 61290-93-5P 68983-54-0P
72239-29-3P 72239-32-8P 72239-33-9P 74548-48-4P 74548-55-3P
74606-09-0P 74787-61-4P 74787-63-6P 74787-64-7P 74787-66-9P
74787-70-5P 74787-71-6P 74787-72-7P 74787-74-9P 74787-81-8P
74787-86-3P 74787-87-4P 74787-90-9P 74787-91-0P 74787-92-1P
74787-93-2P 74787-98-7P 74787-99-8P 74788-00-4P 74788-01-5P
74788-02-6P 74788-03-7P 74788-04-8P 74788-05-9P 74788-06-0P
74788-07-1P 74788-08-2P 74788-09-3P 74788-10-6P 74788-11-7P
74788-12-8P 74788-13-9P 74788-14-0P 74788-16-2P 74788-17-3P
74788-19-5P 74788-20-8P 74788-21-9P 74788-22-0P 74788-23-1P
74788-24-2P 74788-25-3P 74788-26-4P 74788-27-5P 74788-28-6P
74788-29-7P 74788-30-0P 74788-31-1P 74788-32-2P 74788-33-3P
74788-34-4P 74788-35-5P 74788-36-6P 74788-37-7P 74788-38-8P
74788-39-9P 74788-40-2P 74788-41-3P 74788-42-4P 74788-43-5P
74788-47-9P 74788-49-1P 74788-50-4P 74788-51-5P 74788-52-6P
74788-53-7P 74788-54-8P 74788-55-9P 74788-56-0P 74866-89-0P
143543-79-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and diuretic and saluretic activity of)

IT 74788-81-1P 74788-82-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

IT 6098-41-5P 13677-11-7P **61290-32-2P** 61290-40-2P 61290-42-4P
61290-45-7P 61290-46-8P 61290-47-9P 61290-48-0P 61290-50-4P
61290-52-6P 61290-58-2P 61290-61-7P 61290-69-5P 61290-71-9P
61290-72-0P 61290-73-1P 61290-74-2P 61290-75-3P 61290-76-4P
61290-77-5P 61290-79-7P 61290-80-0P 61290-81-1P 61290-84-4P
61290-91-3P 61290-92-4P 74548-43-9P 74548-44-0P 74548-45-1P
74548-46-2P 74548-49-5P 74548-50-8P 74548-51-9P 74548-54-2P
74787-60-3P 74787-62-5P 74787-65-8P 74787-67-0P 74787-68-1P
74787-69-2P 74787-73-8P 74787-75-0P 74787-76-1P 74787-77-2P
74787-78-3P 74787-79-4P 74787-82-9P 74787-83-0P 74787-84-1P
74787-85-2P 74787-88-5P 74787-89-6P 74787-94-3P 74787-95-4P
74787-96-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, cyclization, and diuretic activity of)

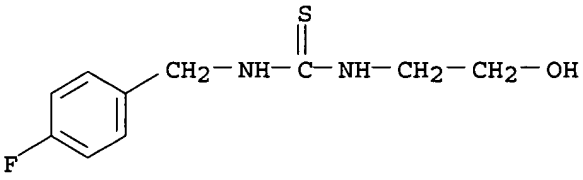
IT 61290-44-6P 74548-41-7P 74548-42-8P 74548-53-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, cyclization, and diuretic and saluretic activity of)

IT 2740-88-7 3694-45-9 4426-82-8 4478-92-6 16735-69-6 18967-42-5
22623-45-6 61290-96-8 63351-94-0 64382-80-5 74788-57-1
74788-58-2 74788-59-3 74788-60-6 74788-61-7 74788-62-8
74788-63-9 74788-64-0 74788-65-1 74788-66-2 74788-67-3
74788-68-4 74788-69-5 74788-70-8 74788-71-9 74788-72-0
74788-73-1 74788-74-2 74788-75-3 74788-76-4 74788-77-5
74788-78-6 74788-79-7 74788-80-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with amines)

IT 78-96-6 96-20-8 107-11-9 109-83-1 110-73-6 111-42-2, reactions
111-75-1 141-43-5, reactions 156-87-6 2842-38-8 2854-16-2
2878-14-0 13325-10-5 42055-15-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with isothiocyanate or carbaminodithioates)

IT 89-93-0 89-97-4 89-99-6 100-46-9, reactions 100-82-3 102-49-8
104-86-9 140-75-0 403-40-7 618-36-0 2740-83-2 2941-19-7
2941-20-0 3048-01-9 3300-51-4 3959-07-7 5763-61-1 6298-96-0
6299-02-1 6668-27-5 7409-30-5 19293-58-4 23459-38-3 51586-20-0
51586-24-4 74788-15-1 74788-18-4 74788-44-6 74788-45-7
74788-46-8
RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with isothiocyanates or carbonodithioates)
IT **61290-32-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, cyclization, and diuretic activity of)
RN 61290-32-2 HCAPLUS
CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1977:16440 HCAPLUS
DN 86:16440
ED Entered STN: 12 May 1984
TI Benzylthiourea diuretics
IN Reiter, Jozsef; Toldy, Lajos; Borsi, Jozsef; Schaefer, Inge; Szondy, Eleonora; Szekely, Jozsef
PA E. Gy. T. Gyogyszervegyeszeti Gyar, Hung.
SO Ger. Offen., 49 pp.
CODEN: GWXXBX
DT Patent
LA German
IC C07C157-02
CC 25-21 (Noncondensed Aromatic Compounds)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	DE 2610865	A1	19760930	DE 1976-2610865	19760315	<--
	SU 795462	D	19810107	SU 1975-2333906	19750312	<--
	IL 49194	A1	19800916	IL 1976-49194	19760310	<--
	CS 188132	P	19790228	CS 1976-1604	19760311	<--
	BE 839502	A1	19760701	BE 1976-165107	19760312	<--
	DK 7601078	A	19760915	DK 1976-1078	19760312	<--
	FR 2303532	A1	19761008	FR 1976-7110	19760312	<--
	FR 2303532	B1	19781215			
	DD 125615	C	19770504	DD 1976-191816	19760312	<--
	AT 347476	B	19781227	AT 1976-1857	19760312	<--
	CA 1069931	A1	19800115	CA 1976-247778	19760312	<--
	CH 619210	A	19800915	CH 1976-3070	19760312	<--
	PL 101310	P	19781230	PL 1976-187917	19760313	<--
	NL 7602670	A	19760916	NL 1976-2670	19760315	<--
	IN 143559	A	19771224	IN 1976-CA456	19760315	<--
	GB 1499485	A	19780201	GB 1976-10200	19760315	<--
PRAI	HU 1975-GO1303	A	19750314	<--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 2610865	IC	C07C157-02

AB RR1C6H3CHR2NHCSNR3R4 [I; R, R1 = H, OMe, CF3, Cl, etc.; R2 = C1-7 alkyl; R3 = H, alkyl, CH2CH2OH; R4 = allyl, CH2CH2OH, (CH2)3OH)] were prepared by reacting R3R4NH with RR1C6H3CHR2X (X = NCS, NHCSCl).. Thus, 4-FC6H4CH2NCS in CHCl3 was added to HOCH2CH2NH2 in CHCl3 at 0°, and the mixture was refluxed for 1 hr to give 100% 4-FC6H4CH2NHCSNHCH2CH2OH. About 65 other I were prepared, useful as diuretics, as shown by tests on rats.

ST diuretic benzylthiourea; thiourea benzyl diuretic

IT Diuretics
((hydroxyalkyl)benzylthioureas)

IT 13677-11-7P **61290-32-2P** 61290-40-2P 61290-42-4P
61290-44-6P 61290-45-7P 61290-46-8P 61290-47-9P 61290-48-0P
61290-50-4P 61290-51-5P 61290-52-6P 61290-53-7P 61290-56-0P
61290-58-2P 61290-59-3P 61290-60-6P 61290-61-7P 61290-65-1P
61290-67-3P 61290-69-5P 61290-70-8P 61290-71-9P 61290-72-0P
61290-73-1P 61290-74-2P 61290-75-3P 61290-76-4P 61290-77-5P
61290-78-6P 61290-79-7P 61290-80-0P 61290-81-1P 61290-82-2P
61290-83-3P 61290-84-4P 61290-89-9P 61290-91-3P 61290-92-4P
61290-93-5P 61319-75-3P 74548-41-7P 74548-42-8P 74548-43-9P
74548-44-0P 74548-45-1P 74548-46-2P 74548-48-4P 74548-49-5P
74548-50-8P 74787-60-3P 74787-61-4P 74787-62-5P 74787-63-6P
74787-70-5P 74787-72-7P 74787-81-8P 74787-82-9P 74787-83-0P
74787-84-1P 74787-85-2P 74787-86-3P 74787-89-6P 74787-94-3P
74787-95-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

IT 61290-97-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, and reaction with amines)

IT 463-71-8 2740-88-7 61290-95-7 61290-96-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with amines)

IT 140-75-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with carbon disulfide)

IT 75-15-0, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with fluorobenzylamine)

IT 109-83-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with isothiocyanates)

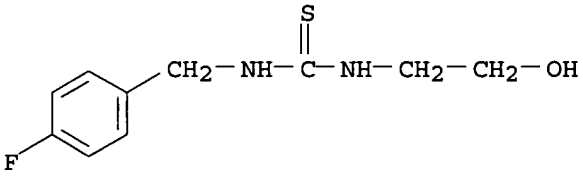
IT 2941-19-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with thiophosgene)

IT 141-43-5, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(with aryl isothiocyanates or thiocarbamoyl chloride)

IT **61290-32-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 61290-32-2 HCAPLUS

CN Thiourea, N-[(4-fluorophenyl)methyl]-N'-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



=>